Record Group 104. Entry 28.

Assay of Foreign Metals. 1857-1861.

Digitized October 24, 2023, Philadelphia, Pennsylvania.

Box 10, Book 14, for 1857-61.

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RG 104 RECORDS OF THE BUREAU OF THE MINT

Records of the U.S. Mint at Philadelphia
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ASSAY WORKBOOKS, 1795-1905

Box 10 NC-152 Entry 20

HC1-80523408 10

Aug 21 1857 English Nickel

2 Gr - 2470 - 2450 - Silex & Iron 60

69

2391

94.

Xxx Oct 14 English Ni 1 Gr

1275 - 1255 Silex 19

44 Iron 21

1211. 4

95 per ct - 44

Same 1274 - 1253 Silex 14

43 Iron 25

4

95.22 per ct - 43

Same 1275 not completed

estimated 95 per

Nov 12 3 Melts from cubical nickel said to be 98½ metal

18.9 per ct 18.72 per ct

Meteoric cubical Ni

Ni 11.07 per ct

1 Gr Cubical Nickel

11.09 per ct

Silen 16

Sub. Cob. 44

Iron 37

Silen 124

Lime 3½

53

osc. ni 1220 – 1192

53

1139

89.65 per ct

Iron 33

Silen 20

Lime 3½

56½

Iron 1225 – 1205

56

1149

90.42 per ct

Mean 90 per ct

Nov 10 1858 English Nickel

2 Grammes Silex 31

Ox Ni 2508 after Washing 2487

not finished estimation 94.7

Nov 12 2000 ## ox Ni 2545

2485

Silex 44 Iron 37=78 78

94.8 per

Nov 15 2000 ## ox Ni 2510

after washing 2476

75 Silex & Iron

94.45 per cent 2401

Nov 19 2000 ## ox Ni 2558 per ct

2485 Ni 94.75

Same 2000 ## ox Ni 2517

2484

Iron 30 Silex 45=75 75 per ct

Silex 34 in ni 94.75

Swedish Nickel 1st lot by W H

3000 ## 2481 Silex 31

2455 Iron 70

101 101

2344 -

11

2355

62 per ct

Swedish Nickel Melted

2481 Silex 45

2406 Iron 59

104

60.8 per ct

1.3 Silex in Nickel

62.1

from melting

Same 2515 Silex 43

2410 Iron 85

128

61.1 per ct

1.3 Silex from melting

62.4

Swedish Nickel

2512
2460
113

Silex 41
Iron 77
102

61.5

No. 2 2457
2430
102

Silex 38
Iron 64
102

61-0

2473
2455

61.7 per

Iron & Silex not Det

2560
2463
97
2364

Silex 34
Iron 65

62 per ct

Six cases

English Nickel Nov 26/59

2 Gr. 2491 Silex 24
2475 Iron 29
53 53
2422

95.30
05 less
95.25

N° 2 2509 Silex 28
2479 Iron 25
53 53
2426 95.46
05 less
95.4 per ct

N° 3 2522 Silex 38
2491 Iron 31
69 69
2422

95.30
05 less
95.25 per ct

three cases

English Nickel Dec 1859

2 Gr 2480 oxide Ni Silex 31.
2481 Iron 28
59 59
94.5 per cent

2 2572 Silex 38
2481 Iron 34
72 72
94.79

3 2585 Silex 53
2525 Iron 35
95.7 91

This was worked without separating the silex from the original solution. no doubt depression from the formation of silicate of potash

Samples of German Ni in cubes

N°1	1300	Silex	40	Copper
	1260	Iron	32	abat 2/4
				93.49
Same	1307	Silex	40	
	1270	Iron	33	94.1/4
N°. 2	2398	Silex	43	Cop 7.4
	2337	Iron	43	Pur 1 —
	Arsenic & Cobalt			88.57
Same	2406	Silex	44	Cop 7.4
	2337	Iron	40	88.26 1/4
N°3	1637	37	Silex	Cop 33 —
	1594	61	Iron	
				58.86

Same 1624 Silver 36 Copper 33
1595 Iron 63
per 1- 58.86

2 cases of English Nickel
Assay of 1866

2 Gr 2505 — 37
2485 — 31
20 — 68

95.10

5 less 95.05

A combined assay from the eleven cases of the English nickel which gave a return of 94.9

Assay of fused nickel from Bullock & Crenshaw

2000. Silex 10

fuller 4

6

2570

2546 after washing and heating repeatedly until it was constant

2546 Silex 30

61 Iron 31

2485 61.

12425

97.78

5 silex

98.126

Assay of fusia nickel to
ascertain the amt of silex &
Carbon 2000 lbs Metal
Silex 4.. 6

English Nickel Mar 5

2 grammes 1st Set 2548

after wash 2521

Small crucible 2515 cond

Silex 33 2515

64

Iron 31 2451

64 1225.5

Qb 44

Same 2 Gr 2557

2537

Silex 43

Iron 30 Qb 95

Same 2 G 2515

2500

Silex 29

Iron 28 Defective Qb 13

from decrepitation

English Nickel March 1866

2 Gr

2538 1st

2525 2d

Selen 34

Iron 28

96 91

Same 2 Gr

Selen 35

Iron 25

2537

2527

97.07

Same 2 G

Selen 32

Iron 30

2539

2523

96 84

*97

In this case the first filter broke washed with acid and precipitated the solution with potash collected

on a small filter weighed after
burning 20 M selen from
filter & potash say 14 or 15 leaves
five or six for nickel which
would make it 97.03 or 97.07

Assay of oxide of Lead
used for assay of Sweep

5 g reduced with Charcoal
& soda gave 4.20 g Lead
worked off in the Melting furnace
and finished in the assay
furnace gave 5 Mg of Silver
which would be equal to about
$\frac{8}{100}$ of a cent per lb of sweep
there is no doubt that the
absorption in working off
the sweep is much greater
than the above it contained
a trace of gold

March 4th 1861

2 boxes of Nickel from M Phillips

2 Grammes 2443 2d Det 2400

Iron 41 Silex 38 91.33

Same 2452 2d Det 2400

Iron 43 Silex 38 91.25

Same 2435 2d Det 2390

Iron 33 Silex 37 91.29

Silex before precipi 6.85

Copper 1.28

99.42

it contained a little carbon

Mar 15th 1861

4 Boxes of Nickel from Ill. Phillips

2 Gram 2435 -2° Det 2330

Silex 44 Iron 29 88.81

Same 2395 2° Det 2328

Silex 44 Iron 30 88.69

Same 2400 -2° Det 2308

Silex 44. Iron 30 87.90

265 40

88.47

Silex 5.25

Iron 1.05

it contained but a trace of metal precipitated by Sulph. hydrogen strongly marked with carbon the oxide of Nickel could not have been well reduced being in a partial state of oxide therefore the loss of sulphur

March 18 1861

3 Boxes of Nickel from Mt Phillips

2 grammes 2573 .	2d Det	2528
Silex 43 Iron 27		9672
Same 2672	2d Det	2522
Silex 41 Iron 28		9652
Same 2568	2d Det	2526
Silex 44 Iron 30		9648
		28972
		9657.

Silex 50

Iron 100

98.15

It is probable that this nickel contains some lime used in the refining. and a little oxide

Feb 3d 1862 15 boxes of Swedish
nickel Gov Assay 11 boxes 59.8
4lb 62.8 copper & iron to make
up the 100. iron about 8 to per ct per ct

No	3000 lbs	2433	2315	Silex 33	Iron 5lb	58.39
2	"	2330	2278	" 33.	" 52	57.52
3	"	2336.	2284	" 35	" 52	57.68
4	"	2382	2340	" 40	" 55	58.89
5	"	2330	2308	36	" 52	58.23
6	"	2342	2317	* 35	55	58.41

* No silex estimated

The above was reported at
58½ per ct No 273 was rejected
the nickel contained some
carbon which kept the solution
frothing the solution was made
in the broad bottom bottles and
it is probable that a portion
was carried over in the solution
of dissolving of evaporating

Mar 26 1861 Spanish Lead for Assay Dept contains 1/10 of an oz of Silver per ton Twenty Grammes .4 Hl Fine Metal Gold 1/40 Hl about 17 Grains of Gold per ton

Small piece of Silver ore
from Washoe
1500 ℔ gave 7/8 ℔ of Gold
" 113 Silver